IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

HUNTAIR, INC.,)
Plaintiff,)
v.)) Civil Action No. 07 C 6890
CLIMATECRAFT, INC.,) CIVII ACTION NO. 07 C 0890
Defendant.)) The Honorable David H. Coar
CLIMATECRAFT, INC.,))
Counterclaim Plaintiff,)) Magistrate Judge Morton Denlow
v.)
HUNTAIR, INC.,)
Counterclaim Defendant.	,)

CLIMATECRAFT, INC.'S RESPONSIVE BRIEF ON CLAIM CONSTRUCTION

Charles C. Kinne KINNE IP GROUP 1240 Iroquois Avenue, Suite 204 Naperville, Illinois 60563 Telephone: 630.904.0940 Facsimile: 888.887.7158 ckinne@kinnelaw.com

Attorney for ClimateCraft, Inc.

TABLE OF CONTENTS

1.	INTR	CODUCTION	l
II.	THE	CTIONAL CLAIMING IS PROHIBITED BY 35 U.S.C. § 112 ¶ 2 WHEN CLAIMS PURPORT TO COVER ANY WAY OF PERFORMING A CTION	2
III.	"CON	NTROL" REQUIRES MORE THAN "OPERATE"	4
IV.	THE	CLAIMED "CONTROL SYSTEM" MUST BE AUTOMATIC	5
	A.	The Plain Meaning of a "Control System" for "Substantially Peak Efficiency" Precludes Manual Operation	5
	В.	Huntair Grasps at Passages in the Specification that Do Not Relate to a "Control System" for Controlling or Operating the Fan Units at Substantially Peak Efficiency.	7
	C.	The Cited Prior Art Precludes a Construction of "Control System" for Operating at Peak Efficiency that includes Manual Operation	8
V.		"SPEED CONTROL" CLAIMS OF THE '046 PATENT REQUIRE EPENDENT CONTROL OF THE FAN UNITS	.10
VI.		"EFFICIENCY" REFERRED TO IN THE CLAIMS IS "STATIC CIENCY"	.12
	A.	The Intrinsic Evidence Points to "Static Efficiency" as the Measure of Efficiency Called for in the Claims.	.12
	B.	"Power Usage" and "Efficiency" Are Not the Same Thing, and Huntair Knows It	14
	C.	The Alternative Types of Efficiency Advocated by Huntair Only Make "Control for Peak Efficiency" More Complex, and Hence Only Reinforce the Inescapable Conclusion that the Claims are Invalid as Indefinite.	.16
VII.	CON: ONE	"CONTROL" LIMITATIONS OF THE CLAIMS MUST BE STRUED AS MEANS-PLUS-FUNCTION LIMITATIONS BECAUSE OF ORDINARY SKILL IN THE ART WOULD NOT KNOW WHAT JCTURE WOULD PERFORM THE CLAIMED FUNCTION	.17

	A.	Huntair Cannot Rebut the Evidence that One of Ordinary Skill in the Art Would Not Have Known Specific Structure or a Family of Structures that Would Serve as an "Array Controller" or a "Control System" to Control the Fan Units to Operate at "Substantially Peak Efficiency"	17
	В.	Under the Law, This Record Overcomes the Presumption and The Claim Limitations are "Means-Plus-Function" Pursuant to 35 U.S.C. § 112 ¶ 6	18
	C.	Under <i>Biomedino</i> and <i>Aristocrat Technologies</i> , Each Independent Claim is Invalid Pursuant to 35 U.S.C. § 112 ¶ 2	19
VIII.	OTHE	ER CLAIM CONSTRUCTION ISSUES DIVIDE THE PARTIES	20
IX.		COURT SHOULD FIND THIS CASE TO BE EXCEPTIONAL AND RD CLIMATECRAFT ITS ATTORNEY FEES	20
X.	CONC	CLUSION	22

TABLE OF AUTHORITIES

Cases:

ADC Telecommunications, Inc. v. Alcoa Fujikura Ltd., 13 F. Supp.2d 951 (D. Minn. 1998)1	19
Alloc v. Int'l Trade Comm'n, 342 F.3d 1361 (Fed. Cir. 2003)	11
Apex, Inc. v. Raritan Computer, Inc., 325 F.3d 1364 (Fed. Cir. 2003)	8
Aristocrat Technologies Austl. v. Int'l Gaming Tech., 521 F.3d 1328 (Fed. Cir. 2008)1	9
Athletic Alternatives v. Prince Mfg., 73 F.3d 1573 (Fed. Cir. 1996)	.3
Bell Atl. Network Servs. v. Covad Commc'ns Group, Inc., 262 F.3d 1258 (Fed. Cir. 2001).	12
Biomedino, LLC v. Waters Technologies Corp., 490 F.3d 946 (Fed. Cir. 2007)2, 3, 4, 1	9
Chimie v. PPG Indus., 402 F.3d 1371 (Fed. Cir. 2005)	12
Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366 (Fed. Cir. 2008)	12
General Electric Co. v. Wabash Appliance Co., 304 U.S. 364 (1938)	18
Halliburton Energy Svcs. v. M-I, LLC, 514 F.3d 1244 (Fed. Cir. 2008)	20
In re Swinehart, 439 F.2d 210, 58 C.C.P.A. 1027 (CCPA 1971)	.2
Isogon Corp. v. Amdahl Corp., 47 F. Supp.2d 436, (S.D.N.Y. 1998)	19
Katz v. AT&T Corp., 63 F. Supp.2d 583 (E.D. Pa. 1999)	19
Mas-Hamilton Group v. LaGard, Inc., 156 F.3d 1206 (Fed. Cir. 1998)	18
Mass. Inst. of Tech. v. Abacus Software, 462 F.3d 1344 (Fed. Cir. 2006)	8
Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340 (Fed. Cir. 2004)	11
Nilssen v. Motorola, Inc., 80 F. Supp.2d 921 (N.D. Ill. 2000), modified, 130 F.Supp.2d 976	
(N.D. III. 2000)	19
Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314 (Fed. Cir. 2003)	12
Power Integrations, Inc. v. Fairchild Semiconductor Int'l., 422 F. Supp.2d 446 (D. Del. 2006)	18

Purdue Pharma L.P. v. Endo Pharms., Inc., 438 F.3d 1123 (Fed. Cir. 2006)	11
Rexnord v. Laitram Corp., 274 F.3d 1336 (Fed. Cir. 2001)	11
Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211 (1940)	12
South Corp. v. United States, 688 F.2d 1368 (1982)	2
Superguide Corp. v. DirectTV Enters. Inc., 358 F.3d 870 (Fed. Cir. 2004)	11
Toro Co. v. Deere & Co., 355 F.3d 1313 (Fed. Cir. 2004)	3, 18
United Carbon Co. v. Binney & Smith Co., 317 U.S. 228 (1942)	2
Statutes:	
35 U.S.C. § 102(b)	8
35 U.S.C. § 112 ¶ 2	passim
35 U.S.C. § 112 ¶ 6	passim
35 U.S.C. § 132	10
35 U.S.C. § 285	20
Other Authority	
CHISUM ON PATENTS, 8.03[3][c].	20
CHISUM ON PATENTS, 18.03[5][c] n. 1504	18
IEEE STANDARD DICTIONARY OF ELECTRICAL AND ELECTRONICS TERMS, Sixth Ed	. (1996)7

I. INTRODUCTION

Through its claim language and through its contentions before this Court regarding claim construction, Huntair seeks to claim function without describing structure, in contravention of 35 U.S.C. § 112 ¶ 2. This Court should find the patents' claims invalid as indefinite.

A threshold dispute between the parties is over the meaning of "control," best illustrated by analogy. Consider a patent directed to the cruise control feature of a car, claiming a "speed controller" or a "control system" for "controlling the car to run at 65 m.p.h." Huntair asserts this only requires "operating" the car at 65 m.p.h. But that is not enough; the "speed controller" or "control system" requires some *thing* that keeps the car's speed constant, monitoring changing conditions and making adjustments to the car's operation to achieve the desired result.

Huntair's patent claims and its claim construction tell us nothing of what that *thing* is. Each of the independent claims requires an "array controller" or a "control system," yet the patent teaches nothing about what these are or how they work. Instead, Huntair asks the Court to construe the claims to cover anything that works to operate the fan units. Its proposed claim constructions constitute "functional claiming" that is indefinite. *See Halliburton Energy Sycs. v. M-I, LLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008) (discussed *infra*.).

Knowing that the patents teach nothing about the very thing allegedly distinguishing the claims from the prior art, Huntair avoids the function of "control" in its claim constructions. Huntair instead proposes that *mere operation* at "substantially peak efficiency" satisfies the requirement of *control* for "substantially peak efficiency." Huntair avoids discussing "control" because any examination of control's meaning reveals the patents' claims' absence of specificity.

There are numerous other issues revealed by the parties' proffered claim constructions, each of which is independent of the others. A finding for one party on one issue does not compel a finding for that party on any other issue. These include:

- must the claimed "control system" be automatic (Claims 1, 15 and 19, '046 Patent);
- do the "speed control" claims require independent control of each individual fan unit's speed relative to the speed of the other fan units (Claims 15 and 19, '046 Patent);
- how does one measure the claimed "efficiency" (all independent claims);
- are the "peak efficiency" control limitations of the claims to be construed as "meansplus-function" claim limitations (all independent claims); and
- is "substantially" indefinite as used in these claims (all independent claims).

II. FUNCTIONAL CLAIMING IS PROHIBITED BY 35 U.S.C. § 112 ¶ 2 WHEN THE CLAIMS PURPORT TO COVER ANY WAY OF PERFORMING A FUNCTION

Early this year, in affirming a district court's dismissal of litigation following claim construction, Chief Judge Michel of the Federal Circuit explained the dangers of "functional claiming" that can result in indefiniteness under 35 U.S.C. § 112 ¶ 2. Halliburton Energy Svcs. v. M-I, LLC, 514 F.3d 1244, 1255 (Fed. Cir. 2008):

We also note that the two parts of Halliburton's proposed definition discussed above (ability of the fluid to transition quickly from gel to liquid, and the ability of the fluid to suspend drill cuttings at rest) are functional, i.e., the fluid is defined "by what it does rather than what it is." In re Swinehart, 439 F.2d 210, 212, 58 C.C.P.A. 1027 (CCPA 1971). The Supreme Court in two early cases identified the dangers of using only functional claim limitations to distinguish the claimed invention from the prior art. In General Electric, the Court held that a vice of functional claiming occurs "when the inventor is painstaking when he recites what has already been seen, and then uses conveniently functional language at the exact point of novelty." General Electric, 304 U.S. at 371 (holding claims invalid where the grains of the claimed lighting filament were distinguished from the prior art only because they were "of such size and contour as to prevent substantial sagging and offsetting" of the filament during the commercially useful life of the lamp). Likewise, in *United Carbon*, the Court held indefinite claims that recited only "inaccurate suggestions of the functions of the product." United Carbon, 317 U.S. at 234 (holding indefinite patent claims that recited, for example, "sustantially (sic) pure carbon black in the form of commercially uniform, comparatively small, rounded smooth aggregates having a spongy or porous exterior").

(citing General Electric Co. v. Wabash Appliance Co., 304 U.S. 364, 371 (1938) and United Carbon Co. v. Binney & Smith Co., 317 U.S. 228, 234 (1942). The court then explained that 35 U.S.C. § 112 ¶ 6 was adopted to permit "functional claiming," within limits:

Of course, in the 1952 Patent Act, Congress authorized functional claiming, but with limits, in 35 U.S.C. § 112, ¶ 6. For so-called means-plus-function limitations, claim scope is limited to structure disclosed in the specification and equivalents. And if no structure is disclosed, the claim is indefinite. *Biomedino*, 490 F.3d at 950. This statutory provision was meant to preclude the overbreadth inherent in open-ended functional claims, such as those presented in this case which effectively purport to cover any and all means so long as they perform the recited functions.

¹Decisions of the CCPA are binding precedent on the Federal Circuit. South Corp. v. United States, 688 F.2d 1368, 1370 (1982).

(citing *Biomedino*, *LLC v. Waters Technologies Corp.*, 490 F.3d 946 (Fed. Cir. 2007). Thus, under the statute, functional claiming is permissible because the claims are construed as limited to the specific embodiments disclosed, and equivalents; the claims are no longer open-ended.

The *Halliburton* court found the patentee differentiated its invention from the prior art because it was a "fragile gel." Finding the patentee's proposed definition of that term to be insufficiently definite, the Federal Circuit affirmed the district court's decision of invalidity. The court considered adopting a narrow construction of the claimed "fragile gel," explaining "where there is an equal choice between a broader and a narrower meaning of a claim, and there is an enabling disclosure that indicates that the applicant is at least entitled to a claim having the narrower meaning, we consider the notice function of the claim to be best served by adopting the narrower meaning." *Id.*, at 1254-55, quoting *Athletic Alternatives v. Prince Mfg.*, 73 F.3d 1573, 1581 (Fed. Cir. 1996). But the court rejected such a construction because the patentee sought the broadest possible construction, one covering all future improvements regardless of whether the patentee invented such improvements:

such a construction would undermine the notice function of the claims because it would allow Halliburton to benefit from the ambiguity, rather than requiring Halliburton to give proper notice of the scope of the claims to competitors. Additionally, adopting the broadest possible construction could retard innovation because cautious competitors may steer too far around that which Halliburton actually invented, neglecting improvements that otherwise might be made.

The court held the term "fragile gel" to be indefinite.

Claim limitations not using "means for" language are presumed not to be "means-plus-function" limitations, but this presumption is overcome where the party challenging it proves by a preponderance of the evidence that the claim terms recites a function without reciting sufficient structure for performing that function. *Apex, Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1372 (Fed. Cir. 2003). Where the term does not have a "generally understood structural meaning in the art" and is "described in terms of its function not its mechanical structure," then § 112 ¶ 6 applies. *Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206, 1213-1214 (Fed. Cir. 1998). This is because functional terminology may not be construed to any device performing the function but must instead be construed to specific structure; the claim limitation "cannot be construed so broadly to cover every conceivable way or means to perform the function." *Id.* at 1214. *See also Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1325 (Fed. Cir. 2004) ("control

mechanism for controlling the operation" of a valve is a means-plus-function claim limitation because the clause "discloses a function for a 'control mechanism' but does not provide sufficient structural description of this mechanism.").

The quid pro quo for the functional claiming permitted by 35 U.S.C. § 112, ¶ 6 is that one must disclose specific structure that performs the claimed function in the specification, and that the claims will be limited by this disclosure. Where one neglects to provide the structure in the specification, the claim term is indefinite. In Biomedino, the Federal Circuit affirmed a holding that a "control means" was not sufficiently described in the patent specification by a box in Fig. 6 labeled "control," even if one of ordinary skill in the art would have known how to implement the "control means." Biomedino, 490 F.3d at 950.

III. "CONTROL" REQUIRES MORE THAN "OPERATE"

In each of the definitions Huntair provides for the "peak efficiency control" limitations, it rewrites "control" to read "operate." Thus, Huntair's construction of Claim 1 of the '775 Patent changes "an array controller for controlling" to "an automatic system that operates." Its construction of Claim 1 of the '046 Patent changes "a control system for operating" to "operating the fan units." Its construction of Claim 15 of the '046 Patent changes "a control system for controlling \dots said control system allowing control" to "operating the fan units." 2

But there is more to "controlling" something than "operating" it. As Dr. Rice explained:

The terms "array controller" and "control system" are used in the specification of the Hopkins patents and in claims of the Hopkins patents. To understand the meaning of these terms, one would consider the meaning of "control" to one of ordinary skill in the art. In a most generic sense, one of ordinary skill in the art would have understood "control" to require "receiving input information, determining output information necessary to achieve a desired objective, and producing the required output information to achieve the desired objective." In other words, "control" requires knowing what to look at and what to change to reach a desired result – it is a decision-making process requiring some kind of logic.

²In its proposed construction of the claim terms, Huntair *changed* its June 20 definitions, submitting new definitions that (a) insert "a system for" before the word "operating" for Claims 1 and 15 of the '046 Patent, and (b) add a definition for "grid system" for each of the two patents in suit. Cf. Exh. 16 to ClimateCraft Opening Brief [same as Docket Entry 50] with Exh. C, Huntair Opening Brief. Huntair also changed its four-page expert report, served June 20 to affidavit form (cf. Exh. 20 to ClimateCraft Opening Brief with Exh. F, Huntair Opening Brief) and inexplicably dropped Claim 19 of the '046 Patent as an asserted claim cf. Exh. 19, ClimateCraft Opening Brief with p.1, n.2, Huntair's Opening Brief. Huntair's constantly changing tactics should not be condoned, as discussed *infra*.

¶ 50, Rice Report (Exh. 7 to ClimateCraft's Opening Brief). In contrast, Huntair's expert says nothing about what "control" requires.

Consider the cruise control analogy. Patent claims directed to the cruise control feature of a car recite a "speed controller" or "control system" to "control the car to operate at 65 m.p.h." Huntair's analysis leads to a construction that would only require the ability to "operate" the car at 65 m.p.h. But this construction does not describe "control," and is particularly incorrect when the prior art already shows a car that is drivable at 65 m.p.h.

Instead, "control" requires (a) receiving input information, e.g. an increase in demand for power needed to maintain a speed of 65 m.p.h. (e.g., a headwind increases or the car starts climbing a hill), (b) determining output information necessary to achieve the desired objective, e.g. provide additional fuel and air to the engine so the engine delivers more power to the drive wheels, and (c) producing the required output information to achieve the desired objective, e.g. signal the car to provide more fuel and air to the engine so it responds as necessary.

This is the approach ClimateCraft advocates and the Court should adopt.³ If mere operation of the array at peak efficiency is sufficient to constitute "control," the claims would read on the prior art, as discussed, infra.

ClimateCraft did not set forth Dr. Rice's explanation of "control" as a separate jury instruction to be given in its June 20 filing, but the Court may choose to give a separate instruction for "control." If so, the jury should be instructed that "control" requires "receiving input information, determining output information necessary to achieve a desired objective, and producing the required output information to achieve the desired objective." Cf. Exh. 6. Rather than separately instruct the jury on "control," ClimateCraft sought to incorporate the explanation of "control" in its proffered instructions of the claim limitations requiring control, so that examples of the information necessary to achieve the claimed objective would be included.

IV. THE CLAIMED "CONTROL SYSTEM" MUST BE AUTOMATIC

A. The Plain Meaning of a "Control System" for "Substantially Peak **Efficiency**" Precludes Manual Operation

Building on its effort to broaden "control" for peak efficiency to anything that may operate at peak efficiency, Huntair next tries to assert that a "control system" can be manual.

³ The "controller" would be something capable of maintaining the car's speed at a constant 65 m.p.h. A "programmable controller" would be something the driver could use to select the desired speed to be maintained. Thus, while the driver may select the speed to be maintained, the control is still automatic.

This defies the understanding of one of ordinary skill in the art, is contradicted by language in the specification and the prosecution history, and would read on the prior art.

Huntair concedes that an "array controller" must be automatic, see Exh. C of Huntair's Opening Brief at page 3. The analysis, therefore, starts with asking whether the plain meaning of "control system" would differ from that of "array controller" in the respect of manual versus automatic operation. The clear answer is that it would not.

The specification does not explain the difference between a "control system" and an "array controller" except that a "control system [may] include the array controller." 7:12-15. Huntair cited this passage when it indicated it was broadening the claims by changing "array controller" to "control system." See page 8, Huntair's Opening Brief.⁴ This passage does not say how a "control system" and an "array controller" differ. Common sense would suggest the "array controller" must directly control the array, and the control system may well do more than that. But it does not suggest that the "control system" could be manual.

The specification sheds light on how a "control system" can be broader than an "array controller," and the breadth has nothing to do with manual operation:

The air-handling system may contain components such as cooling coils, heating coils, filters, humidifiers, fans, sound attenuators, controls, and other devices functioning to meet the needs of the structures ... Within the air-handling compartment 102 is situated the fan unit 100 (shown in FIGS. 1 and 2 as an inlet cone 104, a fan 106, and a motor 108), fan frame, and any appurtenance associated with the function of the fan (e.g. dampers, controls, settling means, and associated cabinetry).

1:35-38; 1:45-49. These passages suggest a "control system" can be something more than an "array controller" but still support the common sense understanding that both are automatic.

The plain meaning of a "control system" to control a fan array to run at "substantially peak efficiency" is an automatic control system. Every example so suggests, and common sense tells us that a claimed "control system" cannot include a human being. ⁵

⁴ One week before the opening briefs were due, ClimateCraft's counsel asked Huntair's counsel to use the CL-numbered prosecution histories (Exh. 36, 37) for citation, explaining that Dr. Rice used the CL Bates Nos. in his June 20 report (Dr. Karvelis never cited to the prosecution history). Huntair's counsel responded that he had no objection if ClimateCraft cited the CL-numbered copy, but he never answered whether Huntair would do the same. Huntair then cited to and filed its own copies of the prosecution histories, resulting in differing citations to the same record.

⁵ Had the claims been written as a "method for controlling," manual operation might be included. But the claims at issue are apparatus claims (even if means-plus-function), not method claims. Consider: the

Looking to the dictionary confirms this plain meaning. In the IEEE STANDARD DICTIONARY OF ELECTRICAL AND ELECTRONICS TERMS, Sixth Ed. (1996) (Exh. 12 to ClimateCraft's Opening Brief), "control system" is defined as:

- (1) (broadly) An assemblage of control apparatus coordinated to execute a planned set of controls;
- (3) (automatic control) A system in which deliberate guidance or manipulation is used to achieve a prescribed value of a variable.

Id., at 219 (Exh. 12). Here, in the context of the claims, the "control system" must control the fan units to operate "at substantially peak efficiency" – "deliberate guidance or manipulation" used to achieve a prescribed value ("substantially peak") of a variable ("efficiency").

Likewise, as explained by Dr. Rice, and in view of an understanding of what "control" is, one of ordinary skill in the art would understand the term "control system" to preclude manual operation. Exh. 7, ¶ 53, ClimateCraft's Opening Brief.

В. Huntair Grasps at Passages in the Specification that Do Not Relate to a "Control System" for Controlling or Operating the Fan Units at **Substantially Peak Efficiency**

Huntair grasps at passages in the specification that do not relate to the "peak efficiency embodiment" to argue the "control system" can be manual. After citing the part of the specification informing that the "control system" "may include" the "array controller," Huntair veers to the inapposite. Citing 7:12-15, Huntair points out that a "control system" may be used to take fan units on and off line (page 7, Huntair Opening Brief). This nowhere suggests that when doing so to maintain the fan units at "substantially peak efficiency," the "control system" can be manual.

Huntair next cites 7:4-7, noting "a person desiring to control the array may select ... how many fan units to operate" (page 8, Huntair Opening Brief). This passage, too, nowhere suggests "controlling the array" to run the fans at "substantially peak efficiency" - the criteria listed in the cited passage do not include peak efficiency. Moreover, this passage indicates one may make a selection, it does not indicate one can actually control the system manually. See fn. 3, supra.

Huntair admits that the "array controller" is automatic. But the "array controller" of Claim 16 of the '775 Patent is not required to be "programmable" (dependent Claim 26 adds this

7

[&]quot;control system" for controlling the speed of a car cannot include the driver who knows to lift his foot off the gas when the car is going faster than he wants it to go.

limitation), so the automatic nature of the "array controller" must be known for other reasons. Programmability simply permits the user in the field to select the desired outcome – be it "substantially peak efficiency" or some unrelated desired outcome "desired air volume, level of air flow, pattern of air flow, number of fan units to operate." *Cf.* 7:6-7. Huntair's expert, Dr. Karvelis, cites this same passage as support for contending the claimed "control system" for controlling the fan units to run at peak efficiency need not be automatic. But he nowhere explains how the "array controller" must be automatic but a "control system" need not be.

C. The Cited Prior Art Precludes a Construction of "Control System" for Operating at Peak Efficiency that includes Manual Operation

If the "control system" for "controlling" or "operating" the fan units to run at "substantially peak efficiency" is satisfied by manually operating the fans at substantially peak efficiency, the prior art would infringe the claims. This is shown by prior art of record during the prosecution history and by Huntair's admissions regarding that art, in at least two instances.

First, the Simon reference (Exh. 27) permits manually taking fans on and off line and also manually controlling the speed of all the fan units at once. Recall that during the prosecution of the '775 Patent, the PTO rejected all of the pending claims (Exh. 26) under 35 U.S.C. § 102(b), in view of Simon (Exh. 27). The Examiner said Simon shows fans in an array and discloses an "array controller 8 for controlling the [fans units] to run at substantially peak efficiency," Exh. 26, CL 124. As Huntair admitted (Exh. 28, CL 145), Simon shows a single control block 8 from which the speed of all the fans can be varied identically (*see* Exh. 27, 3:27-44). As Huntair also admitted (Exh. 28, 145), the fan units in Simon can be taken out without shutting down the entire array (*see* Exh. 27, 3:21-23). Huntair admitted Simon "teaches two ways to control the fans. First, the user can manually control the number of fans by inserting and connecting the desired number of fans" and "Second, an electric control block can supply a control voltage to the number of fans provided in the fan slide in unit to control the speed of the fans" so that "all the fans are controlled by a single voltage, that can be varied, but it runs all the fans at the same speed." Exh. 28, CL 145.

Second, the AAON prior art fan array shows a 2 by 2 array of fan units having individual speed control of its fan units, thus enabling one to manually turn individual fan units on and off or vary their speed. As part of the March 15, 2005 submission, Huntair included a Declaration of Lawrence Hopkins (Exh. I, Huntair's Opening Brief, also contained in Exh. 36 to ClimateCraft's

Opening Brief at CL 152-158), in which the named inventor of the patents in suit describes the AAON device. Mr. Hopkins admits that the prior art AAON device includes a "fan array" (¶ 6) and that it includes "an array controller that is limited to operating four fans over a limited range."

The prosecution history also reinforces that Huntair could not have intended a "control system" to be manual. Examine the arguments Huntair made to distinguish Simon from the claimed "array controller" (Exh. 28, at CL 145). At that time, Huntair argued that although Simon shows the ability to manually take fans on and off line, it did not show or suggest "any means by which a controller can operate said plurality of fan units at substantially peak efficiency by strategically turning on and off selective ones of said plurality of fan units" (Exh. 28, CL 145-46) – in other words, the controller is automatic.

If one compares then-pending claim 12 with issued claim 1 of the '046 patent:

of claim 11, from which it depends)

- 12. A fan array fan section in an airhandling system comprising:
 - (a) an air-handling compartment;
 - (b) a plurality of fan units:
- (c) said plurality of fan units arranged in a fan array;
- (d) said fan array having at least one fan unit arranged vertically on at least one other fan unit:
- (e) said fan array positioned within said air-handling compartment;
- (f) said air-handling compartment positionable within a structure such that said air-handling system conditions the air of said structure: and
- an array controller programmed to operate said plurality of fan units at peak efficiency by strategically turning on and off selective ones of said plurality of fan units.

Then-pending claim 12 (showing limitations | Issued Claim 1 of the '046, in which "control system" first appears

- A fan array fan section in an airhandling system comprising:
 - (a) an air-handling compartment;
 - (b) a plurality of fan units;
- (c) said plurality of fan units arranged in a fan array;
- (d) said fan array positioned within said air-handling compartment;
- (e) said air-handling compartment associated with a structure such that said airhandling system conditions the air of said structure; and
- (f) a control system for operating said plurality of fan units at substantially peak efficiency by strategically turning on and off selective ones of said plurality of fan units.

For the claim on the left, Huntair argued the "array controller" was automatic and therefore distinguishable over the Simon prior art. Exh. 28, CL 145. For the claim on the right, Huntair now argues the "control system" can be manual. But if it is, the claim is no longer distinguishable from the Simon prior art reference. One having ordinary skill in the art, reading this passage of the prosecution history, would see that if the "array controller" is automatic, the "control system" must be, as well.

The specification and the prosecution history require a construction of the "control system" for operating the fan units as an automatic control. Huntair's proposed construction of the "control system" claim limitations would encompass manual operation of the fan units to take them on or off line, or vary their speed uniformly, and therefore read on the prior art Simon reference and the prior art AAON device. Such a construction is improper, as a [much more] plausible construction is that the claimed "control system" for controlling or operating the fan units at "substantially peak efficiency" must be automatic.

V. THE "SPEED CONTROL" CLAIMS OF THE '046 PATENT REQUIRE INDEPENDENT CONTROL OF THE FAN UNITS

Claims 15 and 19 of the '046 Patent are directed to controlling the fan units for peak efficiency to "control the speed of the fan units ... such that they run at peak efficiency." ⁶ As discussed herein, these are referred to as the "speed control" claims.

Huntair advocates this requires "operating the fan units at speeds achieving nearly peak efficiency by using a manual or automatic control." In addition to ignoring "control," Huntair ignores that the speed must be manipulated on a fan-by-fan basis, as explained during the prosecution to distinguish the claims from the prior art.

The Court should find that the claim and its prosecution history require that the "control of the speed of the fan units" separately control the speed of each fan unit in the plurality. This is proven by Huntair's comments when amending then-pending claim 15 to require separate speed control of the individual fan units in the array. Exh. 35, CL 522-523. Huntair explained how the newly-added language distinguished Claim 15 over Ray:

Claim 15 has been amended in substantially the same manner as claim 1 except that the control system controls the speed of individual fans, rather than turning individual fans off, to cause the plurality of fans to run at substantially peak efficiency.

Id. (Claim 1, of course, requires being able to selectively turn individual fan units on or off.)

⁶ This concept, achieving peak efficiency by speed variation rather than turning selective fan units on and off, is not disclosed in the specification; it was added during prosecution. Although not addressed here, this constitutes new matter and invalidates the claims under 35 U.S.C. § 132.

Huntair also distinguished newly amended Claim 15 over Niedhardt, explaining:

The Applicants have carefully reviewed Fig. 4 and the accompanying description in Neidhardt et al. (col. 3, line 8 to col. 5, line 31) and can find absolutely no teaching or suggestion of an "array controller being programmed to selectively control the speed of each of said plurality of fan units to run at substantially peak efficiency."

Id., at CL 523. Huntair expressly limited its claim to requiring speed control of individual fans by using the words "selectively" and "each," and did so to distinguish them from the prior art.

Claim terms carry their ordinary and customary meaning to those skilled in the art in light of the claim term's usage in the patent specification. *See Superguide Corp. v. DirectTV Enters. Inc.*, 358 F.3d 870, 874 (Fed. Cir. 2004); *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). Here, the plain meaning alone supports a construction that "control of the speed of the fan units in said plurality of fan units" requires individual speed control of each fan unit, because read in context, this is what is described. The comments during prosecution merely confirm the plain meaning attributable to the limitation.

However, even if the Court believed the plain meaning did not require individual speed control but somehow required a construction permitting control of all the fan units' speed uniformly, Huntair's comments during the prosecution history constitute prosecution disclaimer. Prosecution disclaimer "promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution." *Omega Eng'g*, 334 F.3d at 1324.

Statements made during prosecution may also affect the scope of the claims. *Rexnord v. Laitram Corp.*, 274 F.3d 1336, 1343 (Fed. Cir. 2001). Specifically, "a patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution." *Purdue Pharma L.P. v. Endo Pharms., Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006). Where a patentee clearly characterizes the invention in a way to try to overcome rejections based on prior art, these statements are binding. *See, e.g., Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1349 (Fed. Cir. 2004) (limiting "transmitting" to direct transmission over telephone lines because the patentee stated during prosecution that the invention transmits over a standard telephone line, thus distinguishing it from transmission over a packet-switched network); *Alloc v. Int'l Trade Comm'n*, 342 F.3d 1361, 1372 (Fed. Cir. 2003) (finding the patentee expressly disavowed floor paneling systems without "play" because the applicant cited the feature during

prosecution to overcome prior art); Bell Atl. Network Servs. v. Covad Commc'ns Group, Inc., 262 F.3d 1258, 1273 (Fed. Cir. 2001) (operation of the "transceiver" limited to the three stated modes because of statements made to overcome a prior art rejection).

In Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1374-75 (Fed. Cir. 2008), the Federal Circuit explained:

The doctrine of prosecution disclaimer "protects the public's reliance on definitive statements made during prosecution" by "precluding patentees from recapturing through claim interpretation specific meanings [clearly and unmistakably] disclaimed during prosecution." Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1323-24 (Fed. Cir. 2003) (citing in part Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211, 220-21 (1940)) (bracketed material added). Claims should not be construed "one way in order to obtain their allowance and in a different way against accused infringers." Chimie v. PPG Indus., 402 F.3d 1371, 1384 (Fed. Cir. 2005) (citation omitted).

Huntair's proposed construction seeks to do exactly what is forbidden by the law cited above. The "speed control" fans should be construed to require individual control of each fan unit's speed relative to the speed of the other fan units.

THE "EFFICIENCY" REFERRED TO IN THE CLAIMS IS "STATIC VI. **EFFICIENCY**"

Α. The Intrinsic Evidence Points to "Static Efficiency" as the Measure of **Efficiency Called for in the Claims**

The "efficiency" recited by the claims of the patents in suit is "static efficiency." This is the only kind of efficiency referred to in the specification, and appears at 8:11-16:

This can also be referred to as the higher static efficiency in that the present invention eliminates the need for settling means downstream from the discharge of a prior art fan system because there is little or no need to transition from high velocity to low velocity.

Nothing in the disclosure of the patent application suggests any other efficiency.

This description of enhanced efficiency due to the alleged use of multiple fan units, which allegedly change the geometry of the structure to remove the prior art's "points of higher air velocity," correlates with Dr. Rice's explanation as to why a fan's "static efficiency" is commonly used, rather than a fan's "total efficiency." At ¶ 27 of his report (Exh. 7, ClimateCraft's Opening Brief), Dr. Rice explains that "static efficiency" is calculated using a static pressure rise, and "total efficiency" is calculated using a total pressure rise. At \P 29 and 30, he explains:

The static pressure rise, rather than a total pressure rise, is typically used as the primary performance measure for the subject fans. Total pressure rise is generally used for fans that are connected directly to a duct on the inlet and/or the outlet of the fan. There is usually a difference in the area of the inlet duct to the outlet duct which results in a difference in the dynamic pressure. This difference affects the fan power consumption and must be accounted for in determining the fan performance.

In a fan array, the fans are generally connected to a common inlet plenum and a common outlet plenum. These plenums are typically the same size and therefore the air velocity flowing through them is the same at any point of operation. Because there is no change to the velocity from the inlet side of the fan array to the outlet side of the fan array there is no change in the dynamic pressure. Accordingly the total pressure rise and the static pressure rise are the same. As a result, it is common practice for fans of the type currently under consideration to use the static efficiency rather than a total efficiency.

Thus, as set forth in the patents' specification, the geometry of the fan array supports using "static efficiency" instead of "total efficiency" as the base of calculation.

In the same Declaration of Lawrence Hopkins cited by Huntair as allegedly supporting a combined motor efficiency and fan efficiency (p. 12 of Huntair Opening Brief), Mr. Hopkins discusses the alleged shortcomings of the AAON prior art devices and states that they are not capable of "achieving higher efficiencies":

The AAON system *static efficiency* at full flow with four fans operating is 67.32% whereas a nine fan array can be configured to run at 72.4% *static efficiency* using 10 HP motors. Further the nine fan array can be configured to operate with eight fans while maintaining 52,000 cfm at the required pressure of 6.57 tsp [total *static pressure*] while consuming 9.3 brake horsepower at 72.2% *static efficiency*.

¶ 7, lines 12-17 (emphasis added). Mr. Hopkins speaks of the "static efficiency" and the total "static pressure" of the AAON fans as not capable of "achieving higher efficiencies" (line 3) because this is what "efficiency" was understood by one having ordinary skill in the art at the time Mr. Hopkins made his alleged invention.

Unlike the passage in \P 2(b), in which Mr. Hopkins combines concerns about power usage with a discussion of efficiency but nowhere recites that he is speaking to the claim language's "peak efficiency," his reference to the AAON prior art device in \P 7 directly relates to

the claimed goal of "peak efficiency." This connection is more direct, it consistent with the only mention of the type of efficiency found in the specification, and is consistent with what one of ordinary skill in the art would have understood the claimed "efficiency" to mean.

Mr. Hopkins' reference to static efficiency and static pressure is consistent with the data provided in the second provisional patent application to which the patents in suit claim priority, as well. Here, data is provided regarding the fan's "static efficiency" and showing data using "static pressure" versus "airflow." Exh. 23, CL 727. The patent specification expressly incorporates by reference the provisional applications. Exh. 2, 1:22-24.

B. "Power Usage" and "Efficiency" Are Not the Same Thing, and Huntair Knows It

Huntair, through its brief and its expert, Dr. Karvelis, attempts to confuse "power usage" with "peak efficiency." *See* Huntair definition of "efficiency" filed with the Court [docket Entry No. 50] (Exh. 16) at ¶ 2 and compare to the heading II.B.2 (p. 12) of Huntair's Opening Brief; *see* Karvelis Report definition of efficiency (Exh. 20) at ¶ 19 and compare to ¶ 22:

Huntair definition of "efficiency" filed with	Huntair's Opening Brief
the Court [docket Entry No. 50](Exh. 16) ¶ 2	Heading II.B.2 (p. 12)
the ratio of power delivered by the fans to the	The Term Efficiency as Used in the '046
electrical power consumed by the fans	Patents Refers to the Energy Requirements to
	Meet the Demand in the Structure
Karvelis Report (Exh. 20) at ¶ 19	Karvelis Report (Exh. 20) at ¶ 22
Karvelis Report (Exh. 20) at ¶ 19 "peak efficiency" [means] "optimizing the	1 \ / "
* ` ′ "	1 \ / 1
"peak efficiency" [means] "optimizing the	"the efficiency used in the patents refers to
"peak efficiency" [means] "optimizing the ratio of power delivered by the fans to the	"the efficiency used in the patents refers to mechanical power efficiency ("[u]sing a

Confusing "efficiency" and "power consumption" intentionally misstates the laws of physics.

That these two things are different is beyond dispute. The patent specification refers to the separate benefits of reduced power usage and increased fan efficiency. At 2:52-53, the specification states that single fan units "are expensive to operate" and that they "are inefficient in that they only have optimal or peak efficiency over a small portion of their operating range." At 6:54-55, the invention is described as separately offering "reduced operating expenses" and "increased efficiency."

Indeed, in Mr. Hopkins' Declaration dated March 14, 2005 (Exh. I, Huntair's Opening Brief, also contained in Exh. 36 to ClimateCraft's Opening Brief at CL 152-158), he describes at ¶ 1 his background as an engineer in the industry, stating:

I directed the construction of two AMCA (Air Movement and Control Association) test facilities each designed and dedicated to the measurement and quantification of fan performance in the areas of air flow rate, consumed power, pressure, efficiency, vibration, sound, and structural integrity.

At \P 2 he explains how the fan array "outperforms" single fan units by: a) demonstrating lower energy consumption for a given air delivery requirement

[and] b) increasing system efficiency under steady and diversified loads ...

While Mr. Hopkins advocates that the potential exists to accomplish both energy savings and increased fan efficiency, he clearly identifies them as separate considerations, as indeed they are.

In its broadest sense, efficiency is the ratio of power delivered to power supplied. On this, the experts agree, although they have diverging views as to how to measure these variables:

Dr. Rice on Efficiency (¶ 47, Exh. 7)	Dr. Karvelis on Efficiency (¶ 19, Exh. 20)
$\varepsilon = \text{(power delivered to the air flow)}/$	$\varepsilon = \text{(power delivered by the fans)}/$
(power required to drive the fan)	(electrical power consumed by the fans)

The experts disagree on (a) the proper measure of power delivered and (b) the proper measure of power supplied. But under either analysis, the power delivered to the air flow requires knowing the pressure against which the air flow is being delivered, and is far more complicated than tracking the energy consumption for a given air delivery requirement.

The Alternative Types of Efficiency Advocated by Huntair Only Make C. "Control ... for Peak Efficiency" More Complex, and Hence Only Reinforce the Inescapable Conclusion that the Claims are Invalid as Indefinite

Huntair's position regarding "peak efficiency" is muddled, and coupled with its vague construction of "substantially," appears to be deliberately muddled. Huntair cites Mr. Hopkins' declaration as support for a combined efficiency of fans and fan motors, but confuses lowered energy consumption with efficiency. It then offers the Karvelis report, criticizing using "static efficiency" as a measure of fan efficiency in favor of the much more complicated "mechanical power efficiency."

Mr. Hopkins' declaration, submitted nearly one year after the '775 patent application was filed, contains at ¶ 2(b) a discussion of "lowering energy consumption." As described above, lowering energy consumption and achieving peak efficiency are very different and Mr. Hopkins' declaration so states. Mr. Hopkins' declaration states that "fans and motors are most efficient at one load point at a given speed," but one of ordinary skill in the art would know that fans and motors are not most efficient at the same load point. Hence any control for the combined efficiency of the motor and the fan would be incredibly complex.

Recall that the experts disagreed on how to measure the power delivered to the air flow (delivered by the fans). As Dr. Rice explains, the power delivered to the air flow is measured by multiplying the quantity of air per unit time delivered times the pressure against which the air is being driven. At ¶ 14 of his Declaration (Exh. 7), Dr. Rice shows a fan curve illustrating the relationship between the air delivered versus pressure at a given fan size and speed. He explains the science of fan performance, ¶¶ 14-22. He then explains, mathematically, why in this type of system, the fan's calculated performance can be simplified to use "static pressure rise" instead of "total" or "mechanical" pressure rise. ¶¶ 23-34.

Dr. Karvelis⁷ disputes this simplification and asserts that the efficiency should be calculated based on the "mechanical efficiency." Citing a 2008 reference and making no mention of the references in the specification and prosecution history to "static efficiency" and "static pressure," he states "the mechanical efficiency of a given fan design can be different at different speeds and therefore their construction would therefore make the preferred embodiment specification internally inconsistent." Exh. 20, ¶ 17.

The experts also disagreed on how to determine the power required. Here, Dr. Rice assessed the power used by the fan, i.e., the power delivered by (not consumed by) the motor. He therefore did not include a calculation of the motor's efficiency, although he explained how the motor efficiency is considered mathematically. At ¶ 26 of his report, he explains that the power required to drive the fan is determined by measuring the input power (power consumed by) to the motor and determining the motor efficiency. By using an equation in view of a "calibrated motor with a known motor efficiency," Dr. Rice simplified the analysis to remove consideration of motor efficiency from the already difficult task of determining peak efficiency.

⁷ ClimateCraft's citation to Dr. Karvelis should not be taken as an admission that his analysis is admissible. His report served June 20 is purely conclusory and stands in stark contrast to the full explanations offered by Dr. Rice in support of his analysis. Dr. Karvelis made no effort to explain the reasoning behind his analysis of the claim limitations. Huntair appears to believe it can either sandbag ClimateCraft with a supplemental report or withhold any indication of what Dr. Karvelis intends to say until the claim construction hearing itself.

In contrast, Dr. Karvelis complicates it. He insists that the motor's efficiency be included in the calculation, by defining the power consumed as the "electrical power consumed" by the fan motor. Thus, under Dr. Karvelis's analysis, the efficiency would be obtained by multiplying the motor efficiency times the fan efficiency.

Case 1:07-cv-06890

Even though Dr. Rice simplified the analysis as much as possible, using "static efficiency" and not multiplying by motor efficiency, he concludes that the claimed "control" for "substantially peak efficiency" is extremely difficult to perform, and that one of ordinary skill in the art would not know what structure and algorithm would be needed to accomplish it. Dr. Karvelis insists on complicating both calculations, which only further reinforces the conclusion that a person of ordinary skill in the art would not have known specific structure that would perform the claimed function. Dr. Karvelis nowhere offers an explanation as to how one could actually control for substantially peak efficiency.

VII. THE "CONTROL" LIMITATIONS OF THE CLAIMS MUST BE CONSTRUED AS MEANS-PLUS-FUNCTION LIMITATIONS BECAUSE ONE OF ORDINARY SKILL IN THE ART WOULD NOT KNOW WHAT STRUCTURE WOULD PERFORM THE CLAIMED FUNCTION

A. Huntair Cannot Rebut the Evidence that One of Ordinary Skill in the Art Would Not Have Known Specific Structure or a Family of Structures that Would Serve as an "Array Controller" or a "Control System" to Control the Fan Units to Operate at "Substantially Peak Efficiency"

Huntair cannot rebut the extrinsic evidence that a person having ordinary skill in the art would not have know in the 2002-2004 time period what structure would control the fan units to run at "substantially peak efficiency." Dr. Rice explains the difficulties of the alleged control called for by the patent's claims; Dr. Karvelis says nothing on the subject except to advocate different, more complicated, definitions of the components making up efficiency.

Of course, this evidence only makes sense, as the very point of novelty Huntair espoused to the PTO was this "control" for "substantially peak efficiency." Stressing that the claimed control was a key distinction over the prior art, Mr. Hopkins explained in his declaration:

Therefore it would not be obvious to attempt a modification to the controller or fan design [of the AAON prior art device] to achieve peak efficiency, nor would it be obvious to expect the fan array in the AAON design to function to maintain set flow rates in the event of a fan motor failure or to be able to achieve peak efficiency with fewer fans.

CL 157, ¶ 8. In the next paragraph, Mr. Hopkins refers to his "unique array and controller."

300

As in *General Electric*, the point of novelty is thinly described and claimed, as "the inventor is painstaking when he recites what has already been seen, and then uses conveniently functional language at the exact point of novelty." *General Electric*, 304 U.S. at 371. Indeed, Huntair's claim construction contentions continue this functional claiming.

Dr. Rice examined the five independent claims' peak efficiency control limitations, finding for each of them that one having ordinary skill in the art would not have understood a specific structure and logic that could provide the claimed feature. *See* Rice Declaration, Exh. 7, at ¶ 85 (Claims 1 and 16, '775 Patent), ¶ 64-65 (Claim 1, '046 Patent), ¶ 68 (Claim 15, '046 Patent), ¶ 78 (Claim 19, '046 Patent).

B. Under the Law, This Record Overcomes the Presumption and The Claim Limitations are "Means-Plus-Function" Pursuant to 35 U.S.C. § 112 ¶ 6

The limitations governing peak efficiency control are all purely functional limitations. The record before this Court establishes proof by a preponderance of evidence that they should be construed as means-for limitations even though the actual word "means" is not present in the claim limitation. *See Apex, Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1372 (Fed. Cir. 2003) (for burden of proof). These limitations all recite control for peak efficiency but provide no structure for performing that function. As went the "control mechanism for controlling the operation" limitation in *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1325 (Fed. Cir. 2004), the claimed "array controller" and "control system" are means-plus-function claim limitations.

As set forth in CHISUM ON PATENTS, 18.03[5][c] n. 1504, many cases have construed claim limitations that did not use "means for" in their language as falling within § 112 ¶ 6, finding that the presumption against such a construction has been overcome. *Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344 (Fed. Cir. 2006) ("colorant selection mechanism"); *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1325 (Fed. Cir. 2004) ("control mechanism"); *Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206 (Fed. Cir. 1998) ("lever moving elements"); *Power Integrations, Inc. v. Fairchild Semiconductor Int'l.*, 422 F. Supp.2d 446, 459-60 (D. Del. 2006) ("soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle") ("Although one skilled in

the art would know the functionality of soft start, the Court is not persuaded that such a person would also know the precise structures for a soft start circuit, because the function of a soft start circuit can be achieved in a variety of ways making it unclear what the specific structures are for performing the recited functions"); Nilssen v. Motorola, Inc., 80 F. Supp.2d 921, 933-34 (N.D. Ill. 2000), modified, 130 F.Supp.2d 976 (N.D. Ill. 2000) (adjustment input); Katz v. AT&T Corp., 63 F. Supp.2d 583, 608 (E.D. Pa. 1999) (recording testing structure and analysis structure for processing); Isogon Corp. v. Amdahl Corp., 47 F. Supp.2d 436, 449-50 (S.D.N.Y. 1998) ("event detector for detecting," "collector for obtaining," "recorder for recording," and "correlator for correlating") ("these claims dominated by functional description"); are Telecommunications, Inc. v. Alcoa Fujikura Ltd., 13 F. Supp.2d 951, 958 (D. Minn. 1998) (holding structure for holding).

C. Under *Biomedino* and *Aristocrat Technologies*, Each Independent Claim is Invalid Pursuant to 35 U.S.C. § 112 ¶ 2

Once the Court finds by a preponderance of evidence that the claim limitations for peak efficiency control are means plus function limitations, it looks for the claimed function and then for structure in the specification that performs that function. Under two recent decisions of the Federal Circuit, this Court will have no trouble finding the claim limitations to be invalid under $35 \text{ U.S.C.} \ 8 \ 112 \ 9 \ 2$.

In this case, the structure that performs the control for peak efficiency is described as a box 300 labeled "array controller." Nothing more of the structure is disclosed.

In *Biomedino*, the Federal Circuit affirmed a holding that a "control means" was not sufficiently described in the patent specification by a box in Fig. 6 labeled "control," even if one of ordinary skill in the art would have known how to implement the "control means." *Biomedino*, 490 F.3d at 950.

In *Aristocrat Technologies Austl. v. Int'l Gaming Tech.*, 521 F.3d 1328, 1338 (Fed. Cir. 2008), the Federal Circuit affirmed invalidity because the specification did not provide "structure" to perform a computer-implemented function, holding the specification must disclose some kind of *logic or algorithm* to accomplish the claimed function.

The patents in suit claim control for peak efficiency and teach nothing of the structure that does it or the algorithm to follow. The claim limitations at issue are purely functional and there is nothing in the specification to save them. Given that the peak efficiency embodiment of

the patent was the one that survived prosecution and is the purported point of novelty over the prior art, these claims are invalid under 35 U.S.C. § $112 \, \P \, 2$.

VIII. OTHER CLAIM CONSTRUCTION ISSUES DIVIDE THE PARTIES

Other claim construction issues divide the parties, as well. For example, ClimateCraft contends that the term "substantially" as used in the claims of record is indefinite under 35 U.S.C. § 112 ¶ 2. The facts supporting this contention are presented in ClimateCraft's opening brief and will not be repeated here. Huntair notes, in a footnote, that "substantially" has long been recognized as proper in claim language (p. 10, n. 6). However, as noted in CHISUM ON PATENTS, 8.03[3][c]:

Frequently at issue are words such as "substantially," "relatively," and "closely." Such concepts do not render a claim fatally indefinite if the specification provides a standard for measuring substantiality, relativity or closeness such that one skilled in the art can determine whether a particular product or process falls within the language of the claim. The courts clearly are influenced by their perception of whether the patentee has been "as precise as the subject matter permits" or rather has tried "to corral the art by the use of comprehensive indefinite terms."

A number of cases are then discussed (these are not cited here).

Here, the facts are more aligned with *Halliburton*, 514 F.3d at 1255, as Huntair offers no evidence of how the term at issue is definite, but rather seeks to confuse the issue by suggesting "substantially peak efficiency" somehow is satisfied by "reduced power usage." This does nothing to clarify the issue; indeed, it confuses it further.

Other issues of disagreement include the definition of "fan array," briefed in the Opening Brief, and Huntair's newly-submitted "grid system," which Huntair added in its Opening Brief. ClimateCraft urges that the Court adopt ClimateCraft's contentions, for reasons earlier presented.

IX. THIS COURT SHOULD FIND THIS CASE TO BE EXCEPTIONAL AND AWARD CLIMATECRAFT ITS ATTORNEY FEES

ClimateCraft asks this Court to declare this case exceptional pursuant to 35 U.S.C. § 285 and award ClimateCraft its attorney fees. There is no reasonable basis for Huntair bringing this suit, and ClimateCraft told Huntair why shortly after the suit was brought (and before the undersigned was retained). Huntair's motivation in bringing the suit has been to achieve a

temporary advantage in the marketplace by intimidating potential customers with a baseless lawsuit. Meanwhile, Huntair conceals its positions and waits for ClimateCraft to go first, in an effort to sandbag. The claim construction process has been no different.

In the attached letter dated December 18, 2007, ClimateCraft explained that the accused fan array products do not enable separate fan unit control, as required by all the independent claims. ClimateCraft attached a circuit diagram showing that the same signal is sent to each fan unit in the array, thereby preventing a controller from selectively turning on or off a fan unit for any purpose, and thereby preventing any manipulation of the fan units' speed relative to the others in the array.

In contrast, Huntair announced on its website the lawsuit before it even served the Complaint. http://www.huntair.com/HUNTAIR%20Files%20Suit.pdf.

When Huntair responded to ClimateCraft's interrogatory regarding its infringement allegations, Huntair refused to answer. Exh. 18, p. 3. (ClimateCraft simultaneously explained its preliminary non-infringement contentions).

When Huntair later provided infringement contentions, it asserted the accused product contains a "Programmable Logic Controller ("PLC") ... which *may* constitute an array controller." Exh. 19, Exh. A thereto at pp. 1 and 2. It also asserted, for infringement of Claim 19, element (b) of the '046 Patent, that ClimateCraft's products have "independently controllable fan units." *Id.*, at p. 3. With its Opening Brief, Huntair dropped its assertion of Claim 19 without explanation.

During the claim construction exchange, Huntair provided as little as possible. With its opening brief, it changed its contentions from those filed on June 20 regarding each of the peak efficiency control limitations, and it added a contention for "grid system" not seen before. Its expert report is four pages long, states little more than Huntair's contentions and submits as supporting documentation a few pages from a 2008 publication. Exh. 20, 21. In contrast, ClimateCraft submitted a verified expert report containing explanations of the bases for the opinions stated in it. Exh. 7. Supporting documents are included at Exh. 8-11.

The Court should consider this conduct in determining fees and permit ClimateCraft to supplement its request with a formal motion pursuant to the Local Rules.

X. CONCLUSION

This Court should enter judgment of invalidity and award ClimateCraft its attorney fees. The claims of the patents in suit cannot be construed for two, separate reasons: first, "substantially peak efficiency" is recited in each claim, and second, each claim contains a meansplus-function limitation, central to the claimed invention, for which no corresponding structure is identified in the specification.

Alternatively, should the Court decline to enter judgment at this time, it should adopt ClimateCraft's proffered constructions for the reasons set forth herein.

Respectfully submitted,

Dated: July 21, 2008

/s/ Charles C. Kinne

Charles C. Kinne
KINNE IP GROUP
1240 Iroquois Avenue, Suite 204
Naperville, Illinois 60563

Telephone: 630.904.0940 Facsimile: 888.887.7158 <u>ckinne@kinnelaw.com</u>

Attorney for ClimateCraft, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing CLIMATECRAFT'S RESPONSIVE BRIEF ON CLAIM CONSTRUCTION was served by ECF upon:

David T. Pritikin
Richard T. McCaulley Jr.
Stephanie P. Koh
Nicole E. Kopinski
Benedict F. Frey
SIDLEY AUSTIN LLP
One South Dearborn Street
Chicago, IL 60603
(312) 853-7000
dpritikin@sidley.com
rmccaulley@sidley.com
skoh@sidley.com
nkopinski@sidley.com
bfrey@sidley.com

this 21st day of July, 2008.

/s/ Charles C. Kinne Attorney for ClimateCraft, Inc.



December 18, 2007

VIA E-MAIL: dpritikin@sidley.com

David T. Pritikin, Esq. Sidley & Austin One South Dearborn Chicago, Illinois 60603

RE: Huntair, Inc. v. ClimateCraft, Inc., Case No. 07-C-6890

Dear Mr. Pritikin:

We have studied the patents in suit, U.S. Patent No. 7,137,775 and 7,179,046. All of the claims in both these patents require an array controller or control system that operates the fans selectively. None of the ClimateCraft systems have selectively controllable fan units.

I have attached a page from the ClimateCraft technical submittal relating to the Northwest Community Hospital project, the system accused of infringement in Huntair's complaint. (I assume that you have a copy of the entire submittal document; if not, we will send it to you.) This wiring diagram shows two fan arrays, one for the supply side and one for the return side. Each fan group is controlled by a single VFD, with a second "back up" VFD included for redundancy. As you see, there is no array controller or control system in either fan array that operates the individual fan units selectively. Rather, all the fan motors in each fan array are controlled by a single VFD that operates all the fan motors as a group.

If your firm filed this lawsuit based on the mistaken belief that the accused system included a selective fan control, then we offer you an opportunity to dismiss the lawsuit before ClimateCraft files responsive pleadings. Of course, if you contend that the claims do not require the selective fan control feature, then please let me know. However, in that regard, be advised that we consider such a position frivolous.

In addition, you are undoubtedly aware that Huntair is issuing communications in the field regarding the purported infringement that are likely to have an immediate harmful effect on ClimateCraft. Your client should be aware that should this litigation proceed, ClimateCraft will pursue all available avenues to protect itself against any wrongful interference with its business. Further, and as you know, LSB is a current and long-term client of Sidley & Austin. We are evaluating whether to pursue disqualification.

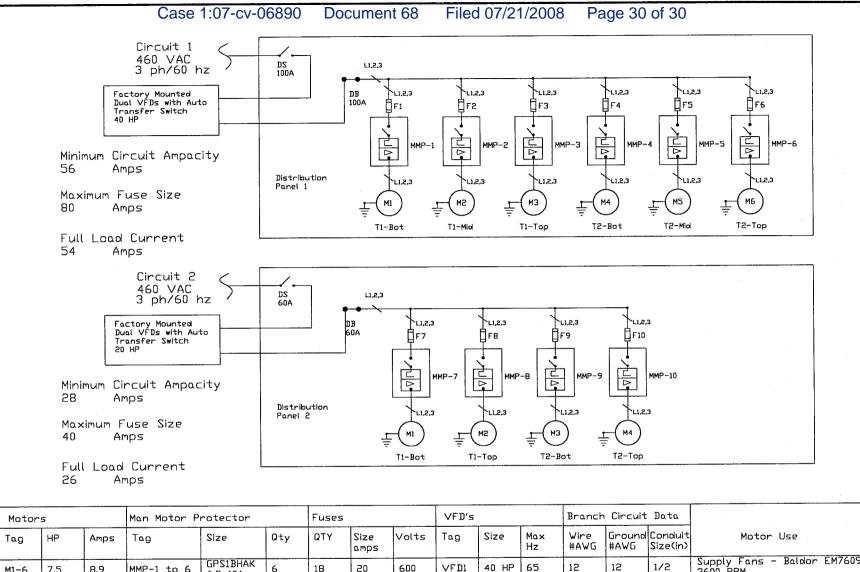
Please contact me to discuss this matter further.

Sincerely yours,

David M. Shear General Counsel

DMS/ymq

16 South Pennsylvania Avenue Oklahoma City, Ok. 73107 Phone (405) 235-4546 Fax (405) 236-1209 Email dshear@lsb-okc.com



Supply Fans - Baldor EM7609T 3600 RPM 7.5 MMP-1 to 6 18 M1-6 8.9 6.3-10A Return Fans - Baldor EM3615T GPS1BHAK 1/2 12 15 600 VFD2 20 HP 69 14 14 5 MMP-7 to 10 M7-12 6.5 1800 RPM 6.3-10A

Note: Nameplate data from specific Baldor Motor is used above. Use the motor amp rating data above for the unit nameplate data.

PO BOX 1538 OKLAHOMA CITY, OK 73101-1538 PHONE (405) 415-9230 - FAX (405) 415-9231 Climate Craft

NORTHWEST COMMUNITY OR EXPANSION

HOSPITAL

22292

 \triangleright

ק

유

12

10/25/07